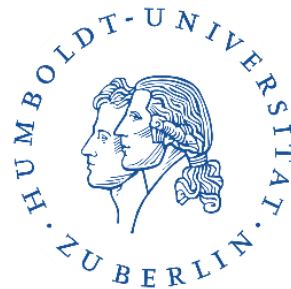


Presenting Science: How to prepare a scientific presentation with impact!

Professor Dr. Çiğdem İşsever



18.09.2023

KIT Student Seminar



Introduction

- Learning about giving good presentations
- Visual impact
 - How not to have any impact at all
 - How to have plenty of impact; just in the wrong way.
 - How to have effective visual impact
- **Encourage you to develop your presentation style**
- **Show you things you should NEVER do**
- **Never say NEVER...**

Some “Rules”

- “There are no Rules.”
- There seem to be only guidelines.
- I mostly agree but there is one VERY important rule!

Some “Rules”

- “There are no Rules.”
- There seem to be only guidelines.
- I mostly agree but there is one VERY important rule!

Know your audience!!!



The Structure of the Talk

Title

Who are you

Where are you from

Date (make sure to update it!)

Occasion or Location

Outline

Tell the audience what will come

Body

Not more than three key messages

- If long, break it up into sub section
- If long, break up the flow with anecdotes or a joke or something of note.

For example:

“When I reached the end of this calculation, I can tell you, I needed a pretty stiff G&T”. This provides a pause, and also reminds the audience that this is actually hard work.

Summary/Conclusions

Summarize key points and results

(Outlook and Backup Slides)

Title of your presentation

A Measurement of X

In Search of X

The Joy of X

Much Ado About X

X

X: A Personal Journey of Discovery

Who am I?

Çiğdem

Çiğdem İşsever

CA İşsever

Professor Dr. Çiğdem İşsever

Doctor CA İşsever

**Doctor CA İşsever
C.Phys., Ph.D., M.Sc., B.S.E.E., M.A.**

Adventures in the Quantum Kitchen

E. Picure

The Escoffier Institute for Quantum Gastronomy

delivered to the

International Conference on Quantum Gastronomy

Bakewell, UK

1st April 2019

“If music be the food of love, play on. Give me excess of it;”

Twelfth Night, William Shakespeare

Outline of talk

- **Introduction**
 - **Overview and status**

- **Recent Progress**
 - **Experimental setup**
 - **Data taking**
 - **Analysis**
 - **Results**

- **Summary and Conclusions**

Adventures in the Quantum Kitchen

E. Picure

The Escoffier Institute for Quantum Gastronomy

International Conference on
Quantum Gastronomy

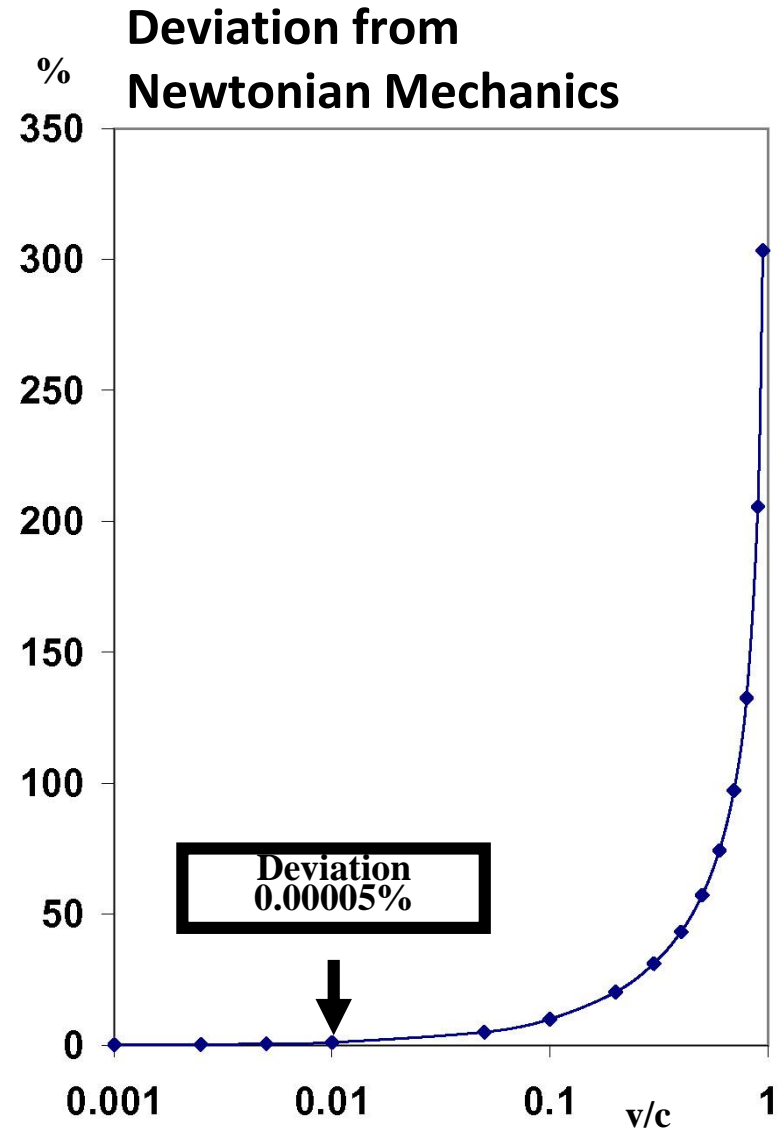
Bakewell, UK
1st April 2009

- **Introduction**
 - Overview and status
- **Recent Progress**
 - Experimental setup
 - Data taking
 - Analysis
 - Results
- **Summary and Conclusions**

Content of a slide

- **Newtonian Mechanics**
 - Adequate for $v \ll c$
- **Special Relativity**
 - Essential for $v \sim c$
- **For $v > 0.01c$**
 - Deviation $> 5 \times 10^{-5} \%$
 - Relativity important

$$0.01c = 3 \times 10^6 \text{ m/s}$$



Everything on the slide has to have a purpose

Purpose of slides

- Some Extreme views on a Slide's purpose:
 - a) To Help the Speaker
 - b) To Help the Audience
- Both are valid, but lead to rather different styles of slide.

A mix of the two can exist.

My Opinion: Audience is King!

Summary and Outlook

■ Summary

- Status quo ante
- Innovation
- Result
- Impact

■ Outlook

- What needs to be done
- What I will do



Thank you

Fonts

- **Several Choices, and they can be important.**
 - Style: Serif or Sans Serif
 - Appearance: normal, **bold**, *italic*, underlined or combined
 - Size: small (8pt), medium (12pt), Large (16pt), Huge (20pt), Vast (24pt)
 - Colour: foreground (**text**) and **background**
- **Hint: Get hold of a data projector, go To Back of room.**
- **Other issues – do you want to try odd fonts?**
- *Gigi*, CASTELLAR, *Segoe Script*, Bradley Hand ITC ...
- **Note: If you use any fancy fonts, you must embed them**
 - **For PowerPoint, use OPTIONS/SAVE/EMBED TRUETYPE FONTS.**

Have a nice day
(Times New Roman 14pt normal)

Have a nice day
(Times New Roman 20pt normal)

Have a nice day
(Times New Roman 20pt normal)

Have a nice day
(Times New Roman 14pt normal)

Have a nice day
(Times New Roman 36pt normal)

Have a nice day
(Times New Roman 14pt italic)

Have a nice day
(Times New Roman 20pt bold)

Have a nice day
(Times New Roman 20pt bold)

Have a nice day
(Arial 14pt normal)

Have a nice day
(Arial 20pt normal)

Have a nice day
(Arial 20pt normal)

Have a nice day
(Arial 14pt normal)

Have a nice day
(Arial 36pt normal)

Have a nice day
(Arial 14pt italic)

Have a nice day
(Arial 20pt bold)

Have a nice day
(Arial 20pt bold)

Have a nice day
(Bradley Hand ITC 20pt bold)

Have a nice day
(Bradley Hand ITC 20pt normal)

Have a nice day
(Gigi 36pt normal)

Have a nice day
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Have a nice day
(Bradley Hand ITC 36pt normal)

Have a nice day
(Bradley Hand ITC 20pt italic)

Have a nice day
(Gigi 20pt normal)

Have a nice day
(Bradley Hand ITC 20pt bold)

Have a nice day
(Gigi 14pt normal)

Have a nice day
(Gigi 20pt normal)

Have a nice day
(Gigi 20pt normal)

Have a nice day
(Bradley Hand ITC 14pt normal)

Have a nice day
(Bradley Hand ITC 20pt normal)

Have a nice day
(Gigi 20pt bold)

Have a nice day
(Gigi 20pt bold)

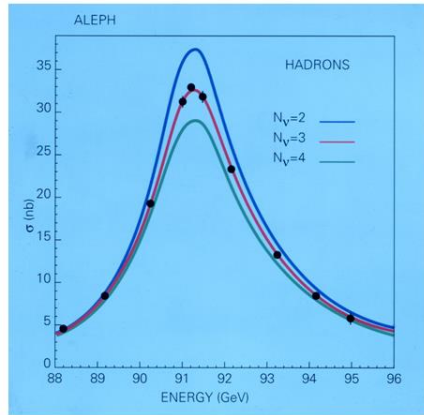
Have a nice day
(Gigi 20pt italic)

Slide Background

Is my background helping audience to understand message?

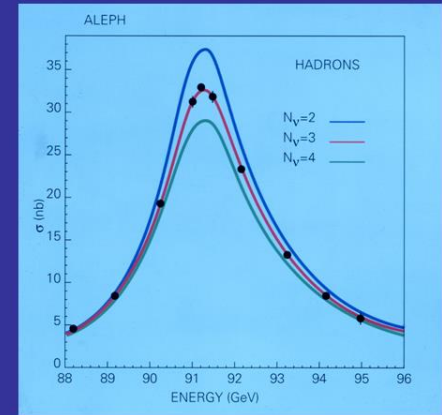
Dark text on a light background

- Have a nice day
- But not too nice!!!
- And be careful



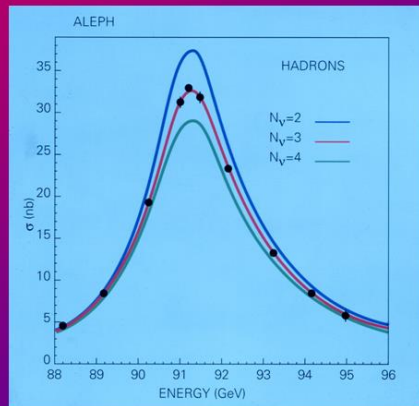
Light text on a dark background

- Have a nice day
- But not too nice!!!
- And be careful



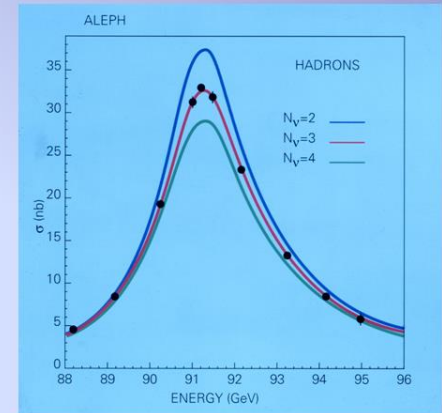
Text on a varied background

- Have a nice day
- But not too nice!!!
- And be careful



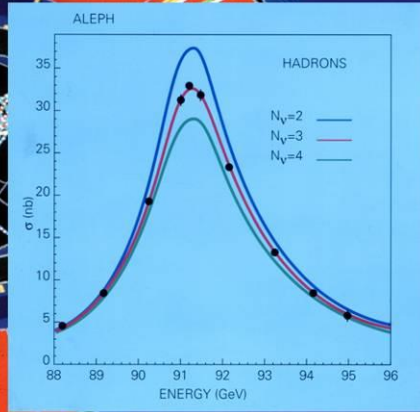
Text on a varied background

- Have a nice day
- But not too nice!!!
- And be careful



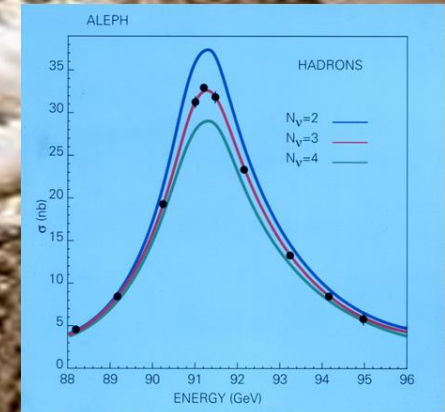
Text on a varied background

- Have a nice day
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- And be careful



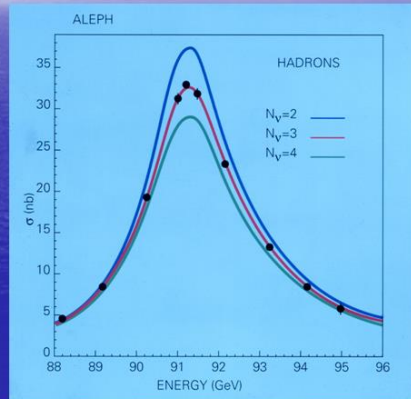
Text on a varied background

- Have a nice day
- But not too nice!!!
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Light text on a dark background

- Have a nice day
- But not too nice!!!
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Act 1

What is Particle Physics?

"There are therefore Agents in Nature able to make Particles of Bodies stick together by very strong Attractions. And it is the Business of experimental Philosophy to find them out."

Sir Isaac Newton

Background with Washout

- Can still “see” the picture
- and the text reasonably clearly
- ... but still distracting?

Making a point: Full Text

Without the Higgs mechanism, all of the particles in the Standard Model (quarks, leptons, gauge bosons) are massless. What the Higgs mechanism does, respecting the underlying symmetry of the Standard Model while spontaneously breaking that symmetry, is to give all of the particles and the weak gauge bosons mass, as well as protecting the masslessness of the photon. A physical consequence of the Higgs mechanism is that there is one massive scalar field that cannot be absorbed in the masses of the other particles, and this is the Higgs boson.

Making a point: Bulleted Text

- Unbroken SM
 - Quarks, leptons massless
 - All gauge bosons massless
- Higgs mechanism
 - Respects the underlying gauge symmetry
 - While spontaneously breaks symmetry
 - Quarks, leptons \rightarrow mass
 - W,Z \rightarrow mass
 - gluon remains massless
- Consequence
 - Physical scalar field \square Higgs field
 - \square Higgs Boson

Making a point: Full Text

Without the **Higgs mechanism**, all of the particles in the Standard Model (quarks, leptons, gauge bosons) are **massless**. What the Higgs mechanism does, respecting the underlying symmetry of the Standard Model while **spontaneously breaking** that symmetry, is to **give** all of the particles and the weak gauge bosons **mass**, as well as protecting the masslessness of the photon. A physical consequence of the Higgs mechanism is that there is one **massive scalar field** that cannot be absorbed in the masses of the other particles, and this is **the Higgs boson**.

Making a point: Bulleted Text

- **Unbroken SM**
 - Quarks, leptons **massless**
 - All gauge bosons **massless**
- **Higgs mechanism**
 - Respects the underlying gauge symmetry
 - While spontaneously breaks symmetry
 - Quarks, leptons → **mass**
 - W,Z → **mass**
 - gluon remains **massless**
- **Consequence**
 - Physical scalar field $\hat{=}$ Higgs field
 - $\hat{=}$ **Higgs Boson**

Making a point: Bulleted Text

- **Unbroken SM**
 - Quarks, leptons **massless**
 - All gauge bosons **massless**
- **Higgs mechanism**
 - Respects the underlying gauge symmetry
 - While spontaneously breaks symmetry
 - Quarks, leptons → **mass**
 - W,Z → **mass**
 - gluon remains **massless**
- **Consequence**
 - Physical scalar field \square Higgs field
 - \square **Higgs Boson**

The history of the neutrino



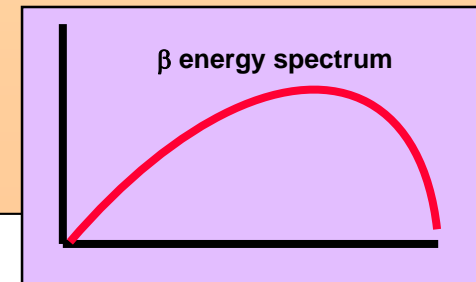
Dear Radioactive Ladies and Gentlemen,

4th of December 1930

As the bearer of these lines, to whom I graciously ask you to listen, will explain to you in more detail, how because of the "wrong" statistics of the N and Li^6 nuclei and the continuous beta spectrum, I have hit upon a desperate remedy to save the "exchange theorem" of statistics and the law of conservation of energy. **Namely, the possibility that there could exist in the nuclei electrically neutral particles, that I wish to call neutrons, which have spin 1/2 and obey the exclusion principle and which further differ from light quanta in that they do not travel with the velocity of light. The mass of the neutrons should be of the same order of magnitude as the electron mass and in any event not larger than 0.01 proton masses. The continuous beta spectrum would then become understandable** by the assumption that in beta decay a neutron is emitted in addition to the electron such that the sum of the energies of the neutron and the electron is constant...

I agree that my remedy could seem incredible because one should have seen those neutrons very earlier if they really exist. But only the one who dares can win and the difficult situation, due to the continuous structure of the beta spectrum, is lighted by a remark of my honoured predecessor, Mr Debye, who told me recently in Bruxelles: "Oh, it's well better not to think to this at all, like new taxes". From now on, every solution to the issue must be discussed. Thus, dear radioactive people, look and judge. Unfortunately, I cannot appear in Tübingen personally since I am indispensable here in Zurich because of a ball on the night of 6/7 December. With my best regards to you, and also to Mr Back.

Your humble servant
W. Pauli



The Birth of the Neutrino



Wolfgang Pauli

Offener Brief an die Gruppe der Radioaktiven bei der
Gesellschafts-Tagung zu Tübingen.

Abschrift

Physikalisches Institut
der Eidg. Technischen Hochschule
Zürich

Zürich, 4. Dez. 1930
Ulmerstrasse

Liebe Radioaktive Damen und Herren,

Wie der Ueberbringer dieser Zeilen, den ich herzlichst
ansprechen bitte, Ihnen das Nähere auseinandersetzen wird, bin ich
angelegentlich der "falschen" Statistik der β - und β -Kerne, sowie
des kontinuierlichen β -Spektrums auf einen verzweifelten Ausweg
verfallen um den "Wochenlohn" (1) der Statistik und den Energiesatz
zu retten. Nämlich die Möglichkeit, es könnten elektrisch neutrale
Teilchen, die ich Neutronen nennen will, in den Kernen existieren,
welche den Spin $1/2$ haben und das Ausschliessungsprinzip befolgen und
sich von Lichtquanten ausserdem noch dadurch unterscheiden, dass sie
nicht mit Lichtgeschwindigkeit laufen. Die Masse der Neutronen
würde von derselben Grössenordnung wie die Elektronenmasse sein und
jedenfalls nicht grösser als $0,01$ Protonenmasse. Das kontinuierliche
 β -Spektrum wäre dann verständlich unter der Annahme, dass beim
 β -Zerfall mit dem Elektron jeweils noch ein Neutron emittiert
wird, derart, dass die Summe der Energien von Neutron und Elektron
konstant ist.

Animation

- There are several different types of animation.
- Remember that using animation *may* slow you down –
- it becomes a “play” and not a discourse.

- If you like it, and **you think it helps the audience**, do it, but don't overdo it (unless you wish to make some specific point that *requires* overdoing it).

- **Embedded clips** (Quicktime, Realtime, video) can be very illuminating, **but beware** – unless you can use your own laptop, it may not work!

- Test it ahead of time, **ON THE CONFERENCE MACHINE!**

A lot of Animation

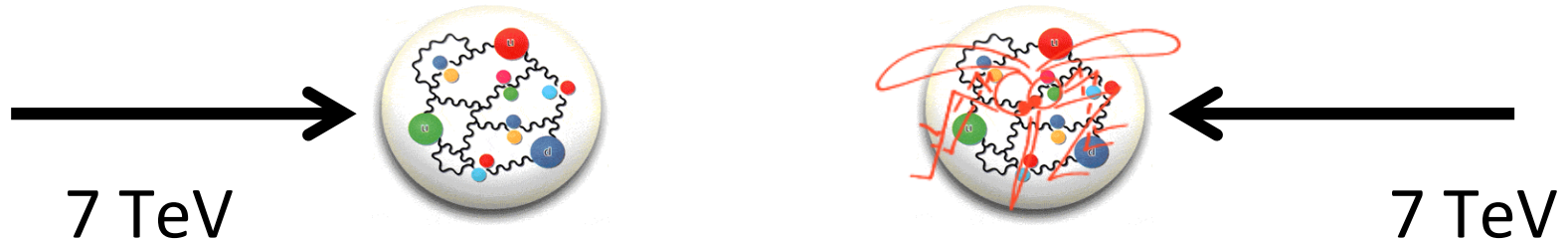
- Here is a line of text
 - And another
 - And another



- And Here is some more
 - And more
 - And more



Proton - Proton Kollisionen bei 14 TeV*



- 1 TeV \sim kinetische Energie (KE) einer Mücke
- Nicht viel....aber
- Energiedichten am LHC sind extrem hoch!

*Lead-lead collisions at 1150 TeV

Mathematical Formulae

- Mathematical formulae present several problems.
 - **Very long, complicated formulae need a lot of explanation** if they are to be understood by the audience.
- **You can still get away with it ONLY if you really think about it!**

Formulae

- Simple formulae in PowerPoint

$$y = m x + c$$

$$y = m x + c$$

$$y = m x + c$$

- *Or in Microsoft Equation*

$$y = mx + c$$

-

Complicated Formulae

$$P(\nu_\mu \Rightarrow \nu_e) =$$

$$\begin{aligned}
 & 4c_{13}^2 s_{12}^2 \left(c_{12}^2 c_{23}^2 - s_{12}^2 s_{13}^2 s_{23}^2 - 2c_{12} c_{23} s_{12} s_{23} s_{13} \cos \delta \right) \sin^2 \left(\frac{\Delta m_{21}^2 L}{4E} \right) \\
 & + 8c_{13}^2 s_{12} s_{13} s_{23} \left(c_{12} c_{23} \cos \delta - s_{12} s_{13} s_{23} \right) \cos \left(\frac{\Delta m_{32}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{31}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{21}^2 L}{4E} \right) \\
 & + 4c_{13}^2 s_{13}^2 s_{23}^2 \sin^2 \left(\frac{\Delta m_{13}^2 L}{4E} \right) \left(1 + \left(1 - 2s_{13}^2 \right) \frac{2a}{\Delta m_{31}^2} \right) \\
 & - 8c_{13}^2 c_{12} c_{23} s_{12} s_{13} s_{23} \sin \delta \sin \left(\frac{\Delta m_{32}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{31}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{21}^2 L}{4E} \right) \\
 & - 8c_{13}^2 s_{13}^2 s_{23}^2 \cos \left(\frac{\Delta m_{32}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{31}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{21}^2 L}{4E} \right) \left(1 - 2s_{13}^2 \right) \frac{aL}{4E}
 \end{aligned}$$

$$a = 7.6 \cdot 10^{-5} \rho E$$

Where ρ is the electron density (g/cm^3);

E is the neutrino energy (GeV)

$$c_{ij} = \cos \theta_{ij}, \quad s_{ij} = \sin \theta_{ij}$$

(Richter: hep-ph/0008222)

Neutrino Oscillation Formula – 2 flavour

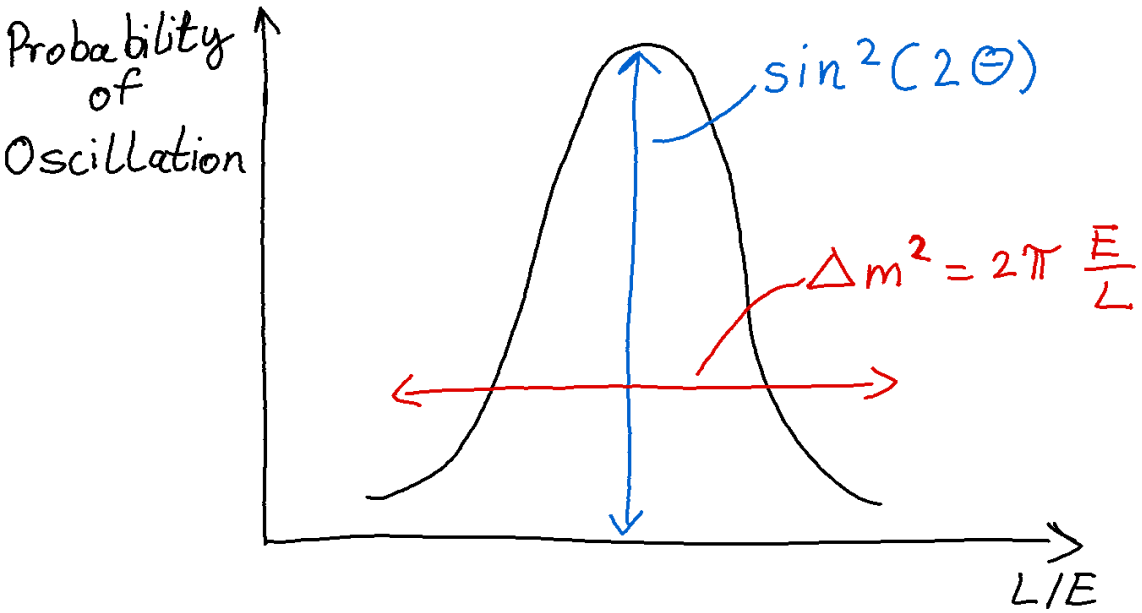
$$P(\nu_\mu \Rightarrow \nu_e) = \sin^2(2\theta) \sin^2\left(\frac{\Delta m^2 L}{4E}\right)$$

Where E is the neutrino energy (GeV)

L is the distance

θ is the mixing angle and

Δm is the mass difference



Neutrino Oscillation Formula – 3 Flavour

3-flavour expression

$$P(\nu_\mu \Rightarrow \nu_e) =$$

$$\begin{aligned}
 & 4c_{13}^2 s_{12}^2 \left(c_{12}^2 c_{23}^2 - s_{12}^2 s_{13}^2 s_{23}^2 - 2c_{12} c_{23} s_{12} s_{23} s_{13} \cos \delta \right) \sin^2 \left(\frac{\Delta m_{21}^2 L}{4E} \right) \\
 & + 8c_{13}^2 s_{12} s_{13} s_{23} \left(c_{12} c_{23} \cos \delta - s_{12} s_{13} s_{23} \right) \cos \left(\frac{\Delta m_{32}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{31}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{21}^2 L}{4E} \right) \\
 & + 4c_{13}^2 s_{13}^2 s_{23}^2 \sin^2 \left(\frac{\Delta m_{13}^2 L}{4E} \right) \left(1 + \left(1 - 2s_{13}^2 \right) \frac{2a}{\Delta m_{31}^2} \right) \\
 & - 8c_{13}^2 c_{12} c_{23} s_{12} s_{13} s_{23} \sin \delta \sin \left(\frac{\Delta m_{32}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{31}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{21}^2 L}{4E} \right) \\
 & - 8c_{13}^2 s_{13}^2 s_{23}^2 \cos \left(\frac{\Delta m_{32}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{31}^2 L}{4E} \right) \sin \left(\frac{\Delta m_{21}^2 L}{4E} \right) \left(1 - 2s_{13}^2 \right) \frac{aL}{4E}
 \end{aligned}$$

Matter Effects

Interference

CP-Violation

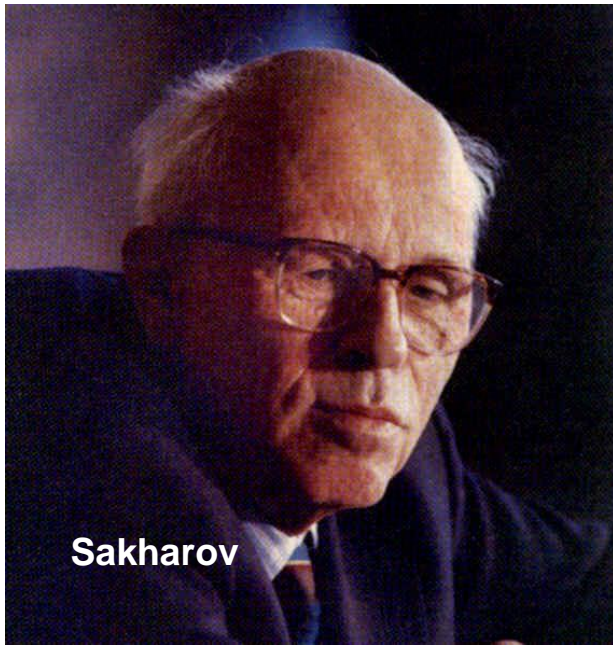
$a = 7.6 \cdot 10^{-5} \rho E$
 Where ρ is the electron density (g/cm³) ;
 E is the neutrino energy (GeV)

$c_{ij} = \cos \theta_{ij}$, $s_{ij} = \sin \theta_{ij}$

(Richter: hep-ph/0008222)

Pictures

- Pictures can enliven an otherwise pedestrian presentation
- The eye/brain is a fantastic “pattern recognition” machine
- However, for each picture shown, indicate:
 - *what* is shown and
 - *why* you have shown it.



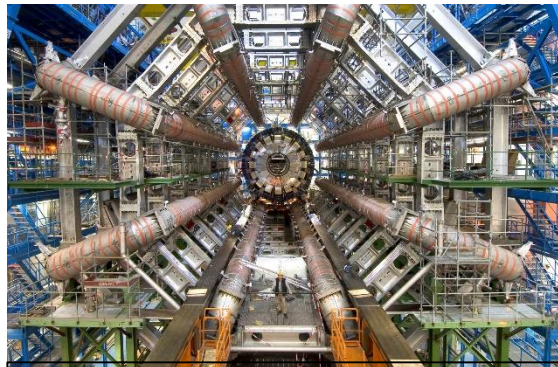
Sakharov



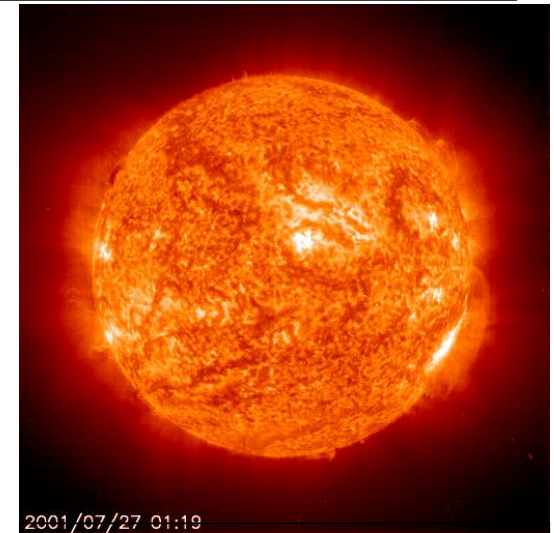
Lise-Meitner Gebäude, Institut für Physik, HU-Berlin



The 160m long NA31 decay tube and helium tank



ATLAS Detector at CERN



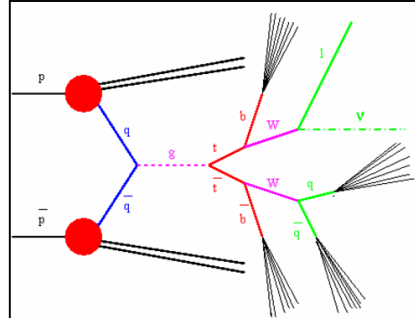
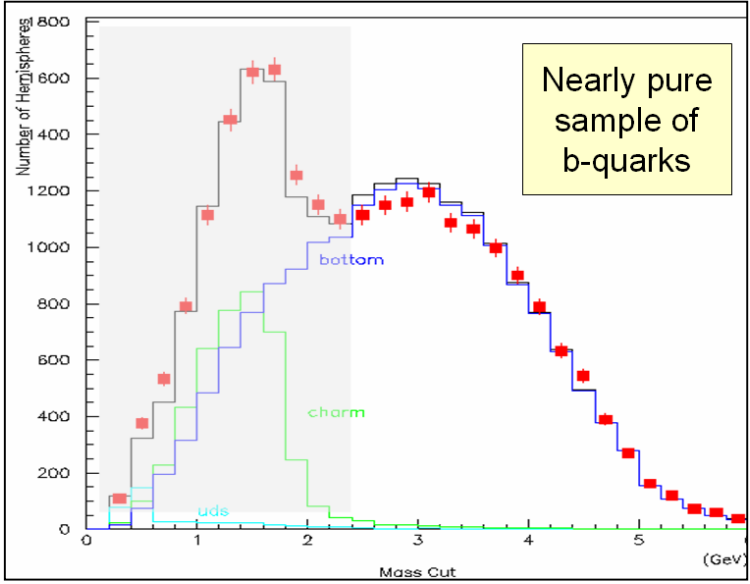
2001/07/27 01:19

The Sun by the SoHo satellite

Plots

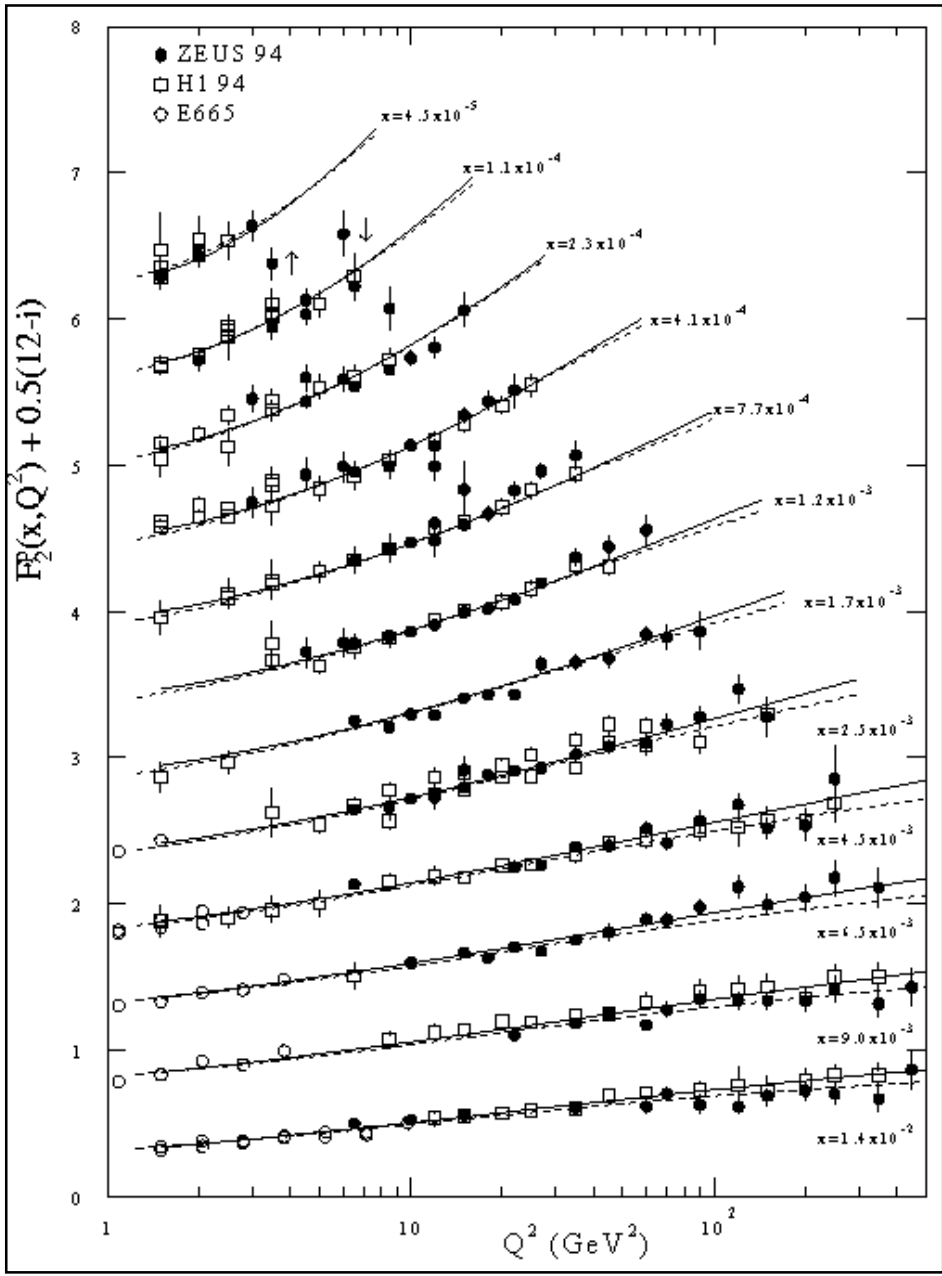
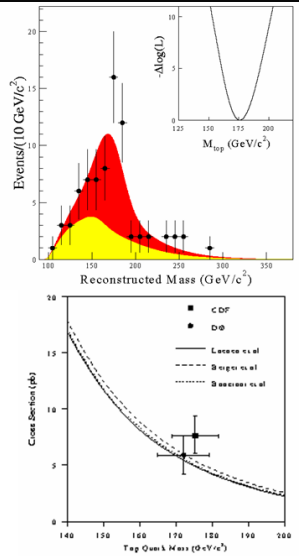
- **Plots: very heart of a physics presentation**
- Given their importance - surprising how often plots fail
- Usually, because the following obscure the meaning ...
 - The plot is too small
 - There is no **title**
 - **axes are unlabelled**, or the labels are *unreadable*
 - scales are **unreadable or missing**, as are the units
 - There are a lot of extra irrelevant “lines”
 - The plot was originally in **colour** but is now in **B&W**

Plots

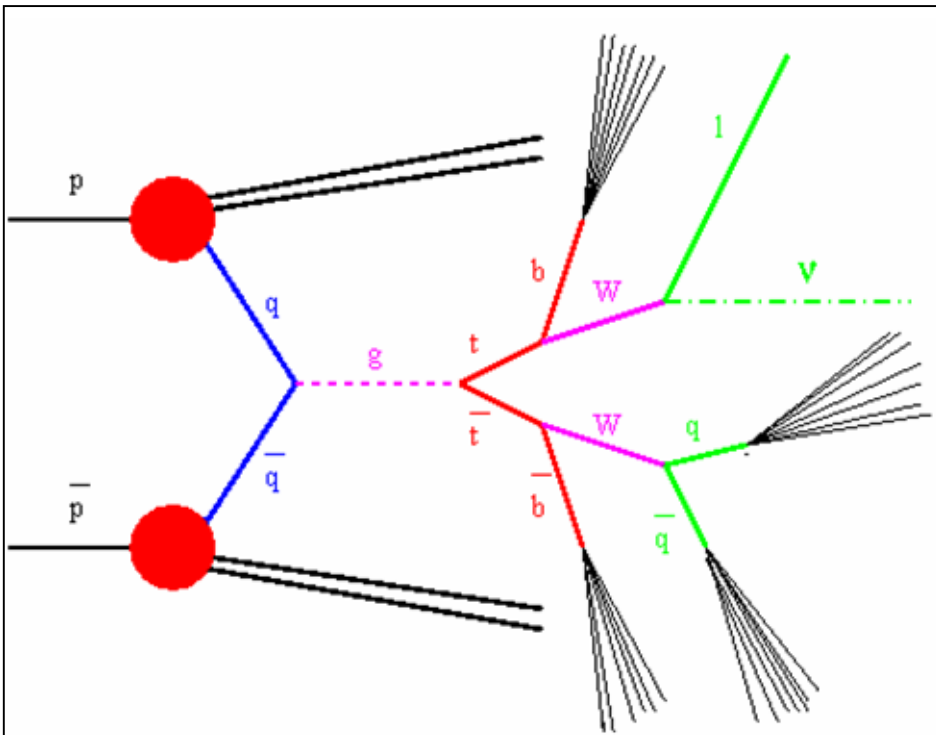


HERWIG: Mike Seymour

HERWIG: > 2000 citations

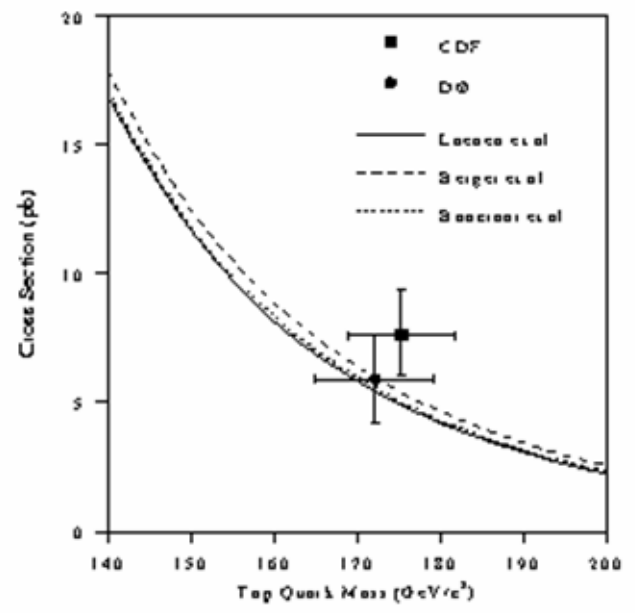
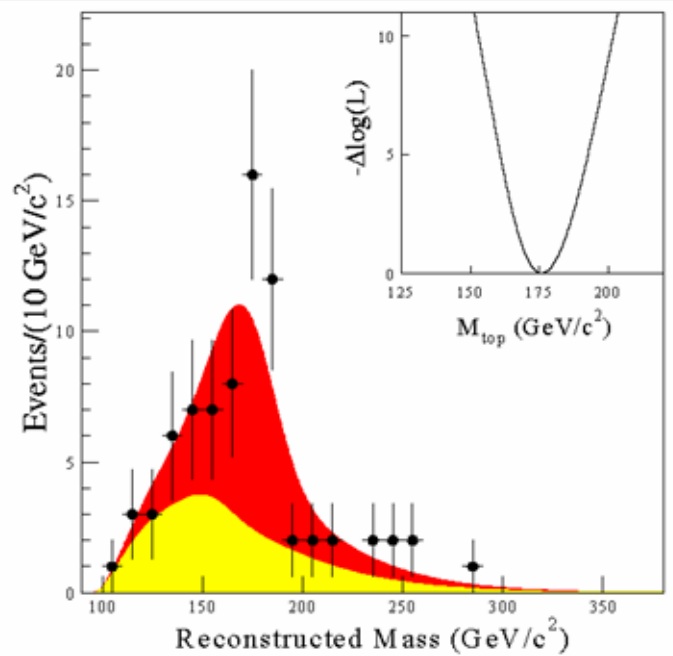


Plots



HERWIG: Mike Seymour

HERWIG: > 2000 citations



Sample Table

M_s [TeV]	M_D [TeV]	M_{thresh} [TeV]	σ [pb]
1.0	1.5	3.0	$(2.32 \pm 0.01) \times 10^{+1}$
1.2	1.8	3.6	$(4.70 \pm 0.01) \times 10^{+0}$
1.4	2.1	4.2	$(9.58 \pm 0.01) \times 10^{-1}$
1.6	2.4	4.8	$(1.87 \pm 0.01) \times 10^{-1}$
1.8	2.7	5.4	$(3.34 \pm 0.01) \times 10^{-2}$

Cross Section Comparisons

$$\sigma_{CH} = \pi r_S^2$$

$$\sigma_{BM} = b_d^2 \pi r_S^2$$

Table 1: $M_D=1000$ GeV, $M_{bh} > 5000$ GeV, and D is the total number of dimensions (space + time).

D	σ_{ch} [pb]	σ_{bm} [pb]	σ_{bm} with $L_{extra} = 0$ [pb]	σ_{bm}/σ_{ch}	σ_{bm}/σ_{ch} with $L_{extra} = 0$	b_d^2
6	75.20 ± 0.6968	90.69 ± 0.8407	99.70 ± 0.9128	1.21	1.32	1.36
7	122.0 ± 1.126	161.9 ± 1.502	177.0 ± 1.638	1.32	1.45	1.48
8	172.6 ± 1.590	247.6 ± 2.304	266.2 ± 2.449	1.43	1.54	1.59
9	225.7 ± 2.076	352.7 ± 3.149	369.0 ± 3.285	1.56	1.63	1.69
10	280.7 ± 2.579	455.2 ± 4.182	484.8 ± 4.419	1.62	1.72	1.78

3 % difference

Some comments to presenting



<https://www.berlin-university-alliance.de/en/impressions/220803-oxber-event/index.html>

Çiğdem İşsever

...DRESS

- Too Dressed up or too dressed down will be noticed.
- Do you want to be noticed for
 - your **Pink Socks** and **Orange striped trousers** or
 - because you have **given a brilliant talk** which the audience understood?
- Maybe you do. Do it for a reason - might be OK.
- **But in general :**
Dress slightly better than your audience will dress.
- Dress **should be functional** (where to put microphone?)
- Dress should **make you feel comfortable and confident**

...Body language



https://www.ted.com/talks/amy_cuddy_your_body_language_may_shape_who_you_are?language=de

...Voice and speaking speed

- Not too fast.
- Take a breath and use pauses.
- Speak up

Some final thoughts

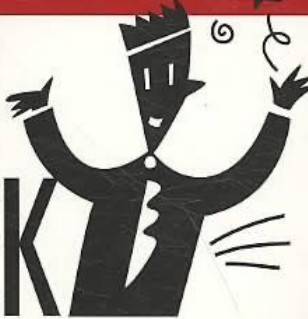
- There are no absolute rules in presentation!
- Rules **CAN** be broken
 - But keep in mind whether they **SHOULD** be!
- Have a care for your *audience*
There is **no** excuse for a sloppy, ill-prepared presentation.
Speak to the audience, not the slides
- Treat a presentation as a *theatrical performance*
 - **rehearse it.**
- ***Do not read from notes!***

Some final thoughts

- Remember, if people cannot hear you
 - ☒ they will not understand the presentation
 - – if a **microphone** is provided, **USE IT and TEST IT**
 - **careful with noisy jewellery or shoes**
- Use of **laser pointers** –
 - practice *where* you want to point, and *keep still*
 - – use it to **POINT** to what you wish to emphasise.
- **Be careful with jokes.**

"WISE WITHOUT BEING PRETENTIOUS, WITTY BUT NOT TRIVIAL . . . PEPPERED WITH USEFUL RECIPES THAT WILL MAKE ANYONE A FAR MORE EFFECTIVE COMMUNICATOR."
JOEL BIRNBAUM, SENIOR TECHNICAL ADVISOR TO THE CEO OF HEWLETT-PACKARD

EVEN A GEEK CAN SPEAK



LOW-TECH PRESENTATION SKILLS FOR HIGH-TECH PEOPLE

JOEY ASHER

OXFORD

Presenting Science

A practical guide to giving a good talk

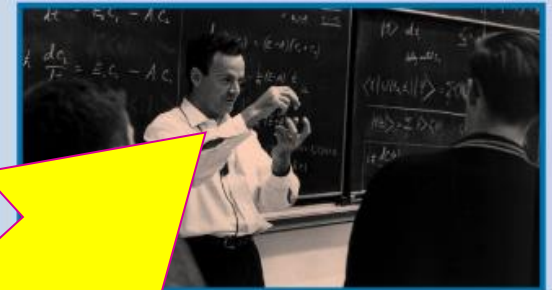
Çiğdem İşsever
Ken Peach



Michael Alley

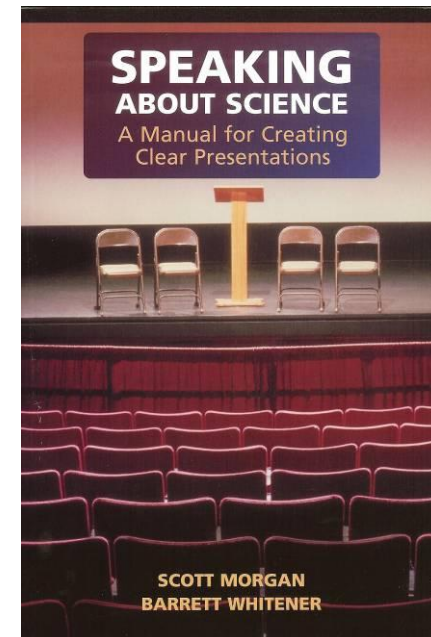
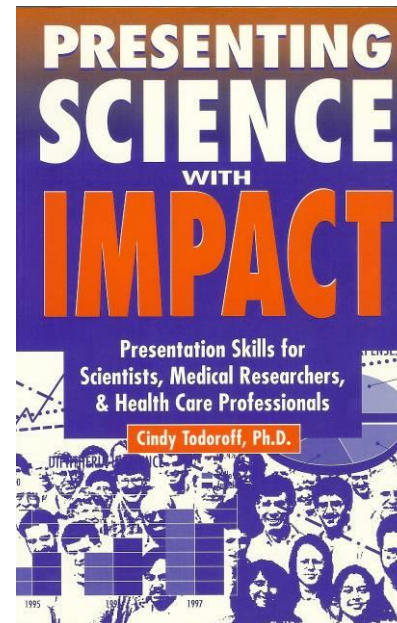
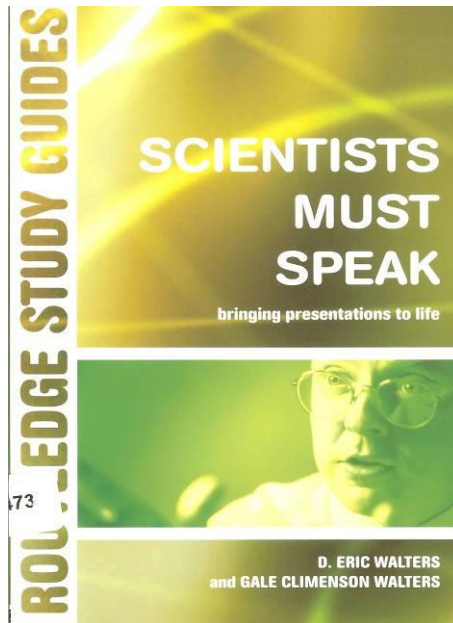
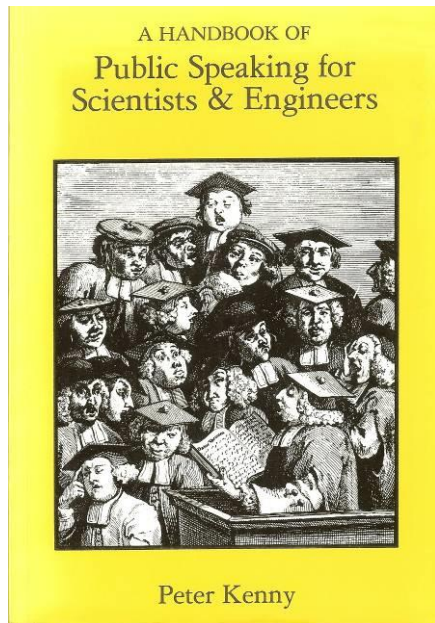
THE CRAFT OF SCIENTIFIC PRESENTATIONS

CRITICAL STEPS TO SUCCEED AND CRITICAL ERRORS TO AVOID



Feynman
— one of the great communicators

Some more books



“This author has hit the proverbial nail on the head, sending much needed advice to speakers in the scientific community ... With such a wealth of information in such a little book, it deserves a niche in the briefcase of all scientists and engineers interested in improving their public speaking skills.” J. Chem. Inf. Comput. Sci. (from Chemical Abstracts Service)
From our point of view, the book is too prescriptive in some cases just wrong (it advises writing out the full text of your presentation in words before you do anything else).

“A horrendous book by my former professor...., Upon reading and studying this guide, I wholly expected that it would provide me with knowledge and confidence in presentations. I was unfortunate enough to encounter Dr. Walters as a professor AFTER reading this title, and am appalled at his lecturing skills. One would think that he would take a few hints/pointers from his own text and apply them to his lecturing.”

(Review on Amazon)

Each chapter starts with a “story” illustrating something that went wrong with a presentation, and then trying to extract the lessons from it. Probably closest to our approach ... basically sound

This is a new book from professional communicators (5 easy steps to the perfect presentation) and claims to be the result of many years of experience running courses. A bit too “slick” for our taste – in general, physicists are a bit wary of a presentation that is too slick.

Summary

- Structure of Presentation
- Slide Structure and Purpose
- Building blocks of a slide
 - Fonts
 - Backgrounds
 - Text and Bullets
 - Animations
 - Mathematical Formulae
 - Pictures and Plots
 - Tables
- Presenting and the presenter
 - Pointer
 - Voice
 - Dress Code
- Literature